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HEWLETT-PACKARD COMPANY

Intellectual Property Administration

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EXAMINER

HUTTON JR, WILLIAM D

ART UNIT

PAPER NUMBER

2179

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,816

Applicant(s)

WIECHERS ET AL.

Examiner

Doug Hutton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-17 and 19-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-17 and 19-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Applicant's Response

In Applicant's Response dated 21 March 2005, Applicant amended Claims 1, 14 and 15, added new Claims 23-36, and argued against all rejections previously set forth in the Office Action dated 19 November 2004.

All rejections previously set forth are withdrawn.

Claim Objections

Claim 1 is objected to because of the following informalities:

- the phrase "to be scanned" in Line 7 should be deleted because the document is reviewed **after** the document is scanned; and
- the term "are" in Line 8 should be amended to — were — because the "determining" takes place **after** the pages have been scanned.

Claim 14 is objected to because of the following informalities:

- the term "the" should be inserted between the terms "if" and "pages" in Line 8 because the "pages" were previously identified in the claim (see Line 6); and
- the term "are" in Line 8 should be amended to — were — because the "determining" takes place **after** the pages have been scanned.

Claim 15 is objected to because of the following informalities:

- the term “the” should be inserted between the terms “wherein” and “determining” in Line 1 because the “determining” was previously identified in the claim (see Claim 14 Line 8).

Claims 23 and 30 are objected to because of the following informalities:

- the term “a” in Claim 23 Line 5 should be amended to — the — because the “selected characteristic” was previously identified in the claim (see Claim 23, Line 3); Claim 30 has the same problem.

Claims 28 and 35 are objected to because of the following informalities:

- the term “a” in Claim 28, Line 5 should be amended to — the — because the “selected margin characteristic” was previously identified in the claim (see Claim 28, Line 3); and
- the phrase “that that” in Claim 28, Line 6 should be amended to — that the — because it appears to be a typographic mistake; Claim 35 has the same mistakes.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 3, 4, 6-16, 21 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 3, 4, 6-13 and 21:

Claim 1 recites a "document processing system" in the preamble. However, the only element recited in the body of the claim comprises a "scan review system" that, *at a minimum*, does not necessarily include hardware. In fact, the "scan review system" comprises only computer software.

Thus, Claim 1 is directed to an arrangement of software and is not limited to a ***tangible*** embodiment.

Applicant may obviate this rejection by reciting at least one piece of computer hardware in the "system" recited in Claim 1. For example, Claim 1 may be amended to recite the "scanner" of Claim 2.

Claims 14-16 and 22:

The subject matter specified in Claims 14-16 and 22 is non-statutory and fails to recite patent-eligible subject matter in that the claims recite a "method" that is not in the useful or technological arts. That is, the claims do not recite a method that includes a step or act that produces a concrete, tangible and useful result.

Additionally, the claimed invention is so abstract and sweeping that it covers the method as practiced by a human operator assisted only by pencil and paper. For example, a secretary may perform this method through mental processes performed

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when reviewing paper documents. The claims do not include a particular machine or apparatus, and no machine-implemented steps are recited. Every step is capable of performance by the human mind. A method of this sort, traditionally called a "mental process," is not patentable subject matter.

"Phenomena of nature, though just discovered, *"mental processes,"* abstract intellectual concepts are not patentable as they are the basic tools of scientific and technological work." (emphasis added) *Gottschalk v. Benson*, 75 U.S.P.Q. 673, 675 (U.S.S.C. 1972). See also, *In re Prater and Wei*, 159 U.S.P.Q. 583 (1968), *rehearing* U.S.P.Q. 571 (1969).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-26 and 30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Sturgeon et al., U.S. Patent No. 6,466,336.

Claim 23:

Sturgeon discloses a method for providing information corresponding to a scanned document, comprising:

- enabling selection of a characteristic of a page of the document (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it permits the user to identify a page designation through a user interface);
- scanning a page of the document (see Figure 1; see Column 1, Lines 6-12 – the document handling system discloses this limitation, as clearly indicated in the cited figure and text);
- reviewing the scanned page for a selected characteristic (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it reviews the page for the page designation selected and entered by the user); and
- based on the act of reviewing, determining if the scanned page is properly aligned for scanning (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it identifies a misfed page based upon the page designation).

Claim 24:

Sturgeon discloses the method of Claim 23, further comprising repeating scanning, reviewing and determining for each page of the document (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it allows a user to individually feed the pages of a document into the scanner, thereby allowing the user to: 1) identify a page designation for each page through a user interface, 2) review the page for the page designation selected and entered by the user, and 3) identify a misfed page based upon the page designation).

Claim 25:

Sturgeon discloses the method of Claim 23, further comprising designating the scanned page for review if it is determined that the scanned page is not properly aligned for scanning (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it flags missing or misfed pages).

Claim 26:

Sturgeon discloses the method of Claim 23, wherein:

- reviewing the scanned page for a selected characteristic comprises determining if the scanned page exhibits the selected characteristic (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the

document handling system discloses this limitation in that it determines whether the page includes the page designation selected by the user); and

- determining if the scanned page is properly aligned for scanning comprises determining that the scanned page is not properly aligned if it is determined that the scanned page does not exhibit the selected characteristic (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it flags the page if no page designation is located).

Claims 30-33:

Claims 30-33 merely recite computer software for performing the method recited in Claims 23-26, respectively. Thus, Sturgeon discloses every limitation of Claims 30-33, as indicated in the above rejections for Claims 23-26.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-17, 19-22, 27-29 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sturgeon, in view of Liu et al., U.S. Patent No. 6,735,335.

Claim 1:

Sturgeon discloses a document processing system for providing information corresponding to a scanned document (see Figures 1-4; see Column 1, Lines 6-12 – the document handling system discloses this limitation, as clearly indicated in the cited figures and text), said document processing system comprising:

- a scan review system configured for receiving scan information corresponding to a scanned document (see Figure 1), said scan review system being configured to enable selection of a registration characteristic of a page of a document to be scanned, review the document to be scanned relative to the selected registration characteristic, and, based on the review, determine if pages of the document are properly aligned for scanning such that, in response to identifying a page of the document as not being properly aligned for scanning, said scan review system designates the page for review (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it permits the user to identify page designations through a user interface, reviews the document for the page designations and identifies misfed pages based upon the page designations).

Sturgeon fails to expressly disclose a registration characteristic, wherein the registration characteristic is at least one of top line, top margin, bottom line, bottom margin, left margin or right margin.

Liu teaches a document processing system for providing information corresponding to a scanned document (see Column 1, Line 66 through Column 2, Line 30 – the document handling system discloses this limitation, as clearly indicated in the cited text), said document processing system comprising:

- a scan review system configured for receiving scan information corresponding to a scanned document (see Figure 2), said scan review system being configured to enable selection of a registration characteristic of a page of a document to be scanned and review the document to be scanned relative to the selected registration characteristic (see Column 3, Lines 27-34; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that the layout attribute analyzer verifies the size of the margins on the scanned page),

wherein the registration characteristic is at least one of top line, top margin, bottom line, bottom margin, left margin or right margin (see Column 3, Lines 27-34; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that the layout attribute analyzer verifies the size of the margins on the scanned page), for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document (see Column 7, Lines 55-62).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system, disclosed in Sturgeon, to include a registration characteristic that is at least one of top line, top margin, bottom line,

bottom margin, left margin and right margin, for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document, as taught by Liu.

Claim 2:

Sturgeon discloses the document processing system of Claim 1, further comprising:

- a scanner communicatively coupled to said scan review system, said scanner being configured to receive the document to be scanned and convert printed information of each page of the document into scan information, the scan information being provided in an electronic format to said scan review system (see Figure 1; see Column 3, Lines 21-27 – the document handling system discloses this limitation, as clearly indicated in the cited figure and text).

Claim 3:

Sturgeon discloses the document processing system of Claim 1, wherein said scan review system is configured to provide a graphical user interface, said graphical user interface being configured to enable selection of the registration characteristic (see Figure 1; see Column 3, Lines 21-27; see Column 3, Lines 50-56; see Column 4, Lines 62-67 – the document handling system discloses this limitation in that it includes a scanner with a user interface for inputting instructions for performing the batch scanning job; also, the computer system includes a monitor, keyboard and mouse for “receiving

data representative of both operational instructions or parameters," as expressly disclosed in Sturgeon; this disclosure implies that the document handling system includes a "graphical user interface").

Claim 4:

Sturgeon discloses the document processing system of Claim 1, wherein said scan review system comprises means for enabling selection of the registration characteristic (as indicated in the above rejections for Claims 1 and 3, the document handling system discloses this limitation).

Claim 6:

Sturgeon discloses the document processing system of Claim 3, wherein said scan review system is configured to determine a page number of each page of a document to be scanned and to designate scan information corresponding to pages of the document that are not scanned in page order (see Column 8, Line 15 through Column 9, Line 35 – the document handling system discloses this limitation in that it locates the page number for each page and employs optical character recognition to flag missing or misfed pages).

Claim 7:

Sturgeon discloses the document processing system of Claim 3, wherein said scan review system comprises:

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- means for determining a page number of each page of a document to be scanned; and
- means for designating scan information corresponding to pages of the document that are not scanned in page order (as indicated in the above rejection for Claim 6, the document handling system discloses these limitations).

Claim 8:

Sturgeon discloses the document processing system of Claim 3, wherein said scan review system is configured to generate two files associated with each page of a document to be scanned, a first of said files containing page content information and a second of the tiles containing page number information, said scan review system being further configured to utilize the page number information to arrange the page content information in page number order (as indicated in the above rejection for Claim 6, the document handling system discloses optical character recognition to identify a page number; also, the document handling system discloses a "first file containing page content information" in that it includes the scanned digital image of the page and a "second file containing number information" in that it includes a text file created through optical character recognition; finally, see Column 9, Lines 14-35 – the document handling system collates the scanned pages, as clearly indicated in the cited text).

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Claim 9:

Sturgeon discloses the document processing system of Claim 3, wherein said scan review system is embodied on a computer readable medium (see Column 3, Lines 21-45; see Column 4, Lines 53-67 – the document handling system discloses this limitation, as clearly indicated in the cited text).

Claim 10:

Sturgeon discloses the document processing system of Claim 3, wherein said graphical user interface provides a page viewing window configured to display therein scan information corresponding to a page of the document to be scanned (see Column 9, Lines 36-49 – the document handling system discloses this limitation in that it allows the user to view the scanned document).

Claim 11:

Sturgeon discloses the document processing system of Claim 9, wherein said scan review system comprises logic configured to designate pages of the document that were not scanned in page order (as indicated in the above rejection for Claim 6, the document handling system discloses this limitation).

Claim 12:

Sturgeon discloses the document processing system of Claim 10, wherein said graphical user interface is configured to provide an operator with information indicating

the pages of the document that were not scanned in page order (as indicated in the above rejection for Claim 6, the document handling system discloses this limitation).

Claim 13:

Sturgeon discloses the document processing system of Claim 10, wherein said graphical user interface provides a page number field, said page number field being moveable by an operator about said page viewing window such that a location corresponding to a page number of a page to be scanned may be designated, and wherein said scan review system is configured to process scan information located in a vicinity of said page number field to determine the page number of the page (see Column 6, Line 54 through Column 7, Line 30; see Column 8, Lines 15-24 – the document handling system discloses this limitation in that it allows the user to input possible locations of page numbers and locates the page numbers through optical character recognition).

Claim 21:

Sturgeon fails to expressly disclose a graphical user interface that is configured to enable an operator to position the registration characteristic selected such that the scan review system compares a position of a document for scanning relative to the position of the registration characteristic selected.

Liu teaches a graphical user interface that is configured to enable an operator to position the registration characteristic selected such that the scan review system compares a position of a document for scanning relative to the position of the registration characteristic selected (see Column 5, Lines 7-45 – the document handling system discloses this limitation in that it allows the user to define a threshold value for a particular attribute; during the analysis of the scanned documents, the selected attribute for each scanned document will be compared to the threshold value; in this way, the operator “positions the registration characteristic” so that the scanned document is compared to the set position), for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document (see Column 7, Lines 55-62).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system, disclosed in Sturgeon, to include a graphical user interface that is configured to enable an operator to position the registration characteristic selected such that the scan review system compares a position of a document for scanning relative to the position of the registration characteristic selected, for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document, as taught by Liu.

Claim 14:

Sturgeon discloses a method for providing information corresponding to a scanned document (as indicated in the above rejection for Claim 1, the document handling system discloses this limitation), comprising:

- enabling selection of a registration characteristic of a page of the document (as indicated in the above rejection for Claim 1, the document handling system discloses this limitation);
- reviewing pages of the document relative to the selected registration characteristic (as indicated in the above rejection for Claim 1, the document handling system discloses this limitation);
- based on the act of reviewing, determining if pages of the document are properly aligned for scanning (as indicated in the above rejection for Claim 1, the document handling system discloses this limitation); and
- enabling receipt of scan information corresponding to the pages of the document (as indicated in the above rejection for Claim 2, the document handling system discloses this limitation).

Sturgeon fails to expressly disclose a registration characteristic, wherein the registration characteristic is at least one of top line, top margin, bottom line, bottom margin, left margin and right margin.

Liu teaches a document processing method for providing information corresponding to a scanned document (see Column 1, Line 66 through Column 2, Line 30 – the document handling system discloses this limitation, as clearly indicated in the cited text), said method comprising:

- enabling selection of a registration characteristic of a page of a document (see Column 3, Lines 27-34; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that the layout attribute analyzer verifies the size of the margins on the scanned page),

wherein the registration characteristic is at least one of top line, top margin, bottom line, bottom margin, left margin and right margin (see Column 3, Lines 27-34; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that the layout attribute analyzer verifies the size of the margins on the scanned page), for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document (see Column 7, Lines 55-62).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Sturgeon, to include a registration characteristic that is at least one of top line, top margin, bottom line, bottom margin, left margin and right margin, for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document, as taught by Liu.

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Claim 15:

Sturgeon discloses the method of Claim 14, wherein determining comprises identifying pages not properly exhibiting the selected registration characteristic (as indicated in the above rejection for Claim 1, the document handling system discloses this limitation).

Claim 16:

Sturgeon discloses the method of Claim 14, further comprising:

- determining whether a current page of the document to be scanned corresponds to an expected page number; and
- if the current page number does not correspond to the expected page number, designating the current page for review (as indicated in the above rejection for Claim 6, the document handling system discloses these limitations).

Claim 17:

Sturgeon discloses the method of Claim 14, further comprising preparing an e-file corresponding to the document to be scanned (see Column 4, Lines 41-52 – the document handling system discloses this limitation in that it stores the scanned documents in an archive).

Claim 19:

Sturgeon discloses the method of Claim 17, wherein preparing an e-file comprises the steps of:

- generating, for each page scanned, a first file containing page content information;
- generating, for each page scanned, a second file containing page number information, each second file being associated with a respective first file; and
- utilizing the second files so as to arrange the page content information of the first files in page number order (as indicated in the above rejection for Claim 8, the document handling system discloses these limitations).

Claim 20:

Sturgeon discloses the method of Claim 19, further comprising:

- identifying pages missing from the e-file (see Column 2, Lines 23-28 – the document handling system discloses this limitation in that it flags missing pages in a batch job);
- scanning the missing pages (see Column 2, Lines 28-29 – the document handling system discloses this limitation in that the user rescans any missing pages); and
- providing page content information associated with the missing pages to the e-file such that the page content information is arranged in page number order (see

Column 2, Lines 30-32 – the document handling system discloses this limitation in that it automatically places all scanned pages in the proper order).

Claim 22:

Sturgeon fails to expressly disclose enabling an operator to position the registration characteristic selected such that a position of a document for scanning can be compared to the position of the registration characteristic selected.

Liu teaches enabling an operator to position the registration characteristic selected such that a position of a document for scanning can be compared to the position of the registration characteristic selected (see Column 5, Lines 7-45 – the document handling system discloses this limitation in that it allows the user to define a threshold value for a particular attribute; during the analysis of the scanned documents, the selected attribute for each scanned document will be compared to the threshold value; in this way, the operator “positions the registration characteristic” so that the scanned document is compared to the set position), for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document (see Column 7, Lines 55-62).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Sturgeon, to include enabling an operator to position the registration characteristic selected such that a

position of a document for scanning can be compared to the position of the registration characteristic selected, for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document, as taught by Liu.

Claim 27:

As indicated in the above rejection, Sturgeon discloses every limitation of Claim 23.

Sturgeon fails to expressly disclose enabling selection of one or more of a position of a top line or a bottom line of the page, or a size of a top margin, bottom margin, left margin or right margin of the page.

Liu teaches a method for providing information corresponding to a scanned document (see Column 1, Line 66 through Column 2, Line 30 – the document handling system discloses this limitation, as clearly indicated in the cited text), comprising:

- enabling selection of one or more of a position of a top line or a bottom line of a page, or a size of a top margin, bottom margin, left margin or right margin of a page (see Column 3, Lines 27-34; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that the layout attribute analyzer verifies the size of the margins on the scanned page), for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document (see Column 7, Lines 55-62).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Sturgeon, to include enabling selection of one or more of a position of a top line or a bottom line of the page, or a size of a top margin, bottom margin, left margin or right margin of the page, for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document, as taught by Liu.

Claim 28:

Sturgeon discloses a method for providing information corresponding to a scanned document, comprising:

- enabling selection of a characteristic of a page of the document (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it permits the user to identify a page designation through a user interface);
- scanning a page of the document (see Figure 1; see Column 1, Lines 6-12 – the document handling system discloses this limitation, as clearly indicated in the cited figure and text);
- reviewing the scanned page for a selected characteristic (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it reviews the page for the page designation selected and entered by the user); and

- based on the act of reviewing, determining if the scanned page is properly aligned for scanning (see Figures 1-4; see Column 2, Lines 16-45; see Column 8, Line 15 through Column 9, Line 13 – the document handling system discloses this limitation in that it identifies a misfed page based upon the page designation).

Sturgeon fails to expressly disclose a *margin* characteristic.

Liu teaches a method for providing information corresponding to a scanned document (see Column 1, Line 66 through Column 2, Line 30 – the document handling system discloses this limitation, as clearly indicated in the cited text), comprising:

- determining a margin characteristic of a page of the document (see Column 1, Line 66 through Column 2, Line 30; see Column 3, Lines 27-34; see Column 4, Line 48 through Column 6, Line 35; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that it determines a margin attribute of a scanned page);
- scanning a page of the document (see Figure 2 – the document handling system discloses this limitation, as clearly indicated in the cited figure);
- reviewing scanned pages for the margin characteristic (see Column 1, Line 66 through Column 2, Line 30; see Column 3, Lines 27-34; see Column 4, Line 48 through Column 6, Line 35; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that it reviews

scanned pages and compares the margin attributes of the scanned pages to previous scanned pages); and

- determining that the scanned page is not properly aligned if the scanned page does not exhibit the margin characteristic (see Column 1, Line 66 through Column 2, Line 30; see Column 3, Lines 27-34; see Column 4, Line 48 through Column 6, Line 35; see Column 7, Lines 12-31; see Column 8, Lines 37-49 – the document handling system discloses this limitation in that it inserts page breaks where the margin attributes of succeeding pages do not compare favorably), for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document (see Column 7, Lines 55-62).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Sturgeon, to include a *margin* characteristic, for the purpose of, in a batch scanning process, determining whether scanned pages belong to the same document, as taught by Liu.

Claim 29:

As indicated in the above rejection for Claim 24, Sturgeon discloses every limitation of this claim.

Claims 34-36:

Claims 34-36 merely recite computer software for performing the method recited in Claims 27-29, respectively. Thus, Sturgeon, in view of Liu, discloses/teaches every limitation of Claims 34-36, as indicated in the above rejections for Claims 27-29.

Response to Arguments

Applicant's arguments filed 21 March 2005 have been fully considered but they are not persuasive.

Arguments for Claims 1, 14, 23, 28, 30 and 35:

Applicant argues that neither Sturgeon nor Liu teach or suggest determining if a scanned page is properly aligned for scanning because: 1) Sturgeon's use of page designations to determine inconsistencies in the orientation of pages in a scanned document is irrelevant to the alignment of a page in the scanner; and 2) Liu's use of layout attributes to determine whether scanned pages belong to the same document is also irrelevant to the alignment of a page in the scanner. See Applicant's Response – Page 15, fourth paragraph.

The examiner disagrees.

The examiner first notes that the phrase “[determining] if pages of the document are properly aligned for scanning” (see Claim 1, Lines 8-9) does not accurately describe the invention. The “properly-aligned” determination for the page is performed **after** the

page is scanned by the scanner. Applicant's invention comprises software that performs every step of the claimed method. The software operates on the electronic data of each page after the page is scanned. That is, the software does not "look" at the hardcopy document that is **to be scanned** and evaluate whether the pages of that document are "properly aligned for scanning." If Applicant disagrees with the examiner's position, then the examiner asks Applicant to explain how the software evaluates the hardcopy document.

Secondly, the relevant claim language reads "determining if pages of the [scanned] document are properly aligned for scanning" (see Claim 14, Lines 8-9). The language used in the recitation - "properly aligned for scanning" - is extremely broad. Such language reads on evaluating the margins of scanned documents, and this is taught in Liu, as indicated in the above rejections. Sturgeon also discloses this limitation in that it determines whether there are any missing pages from the scanned document or whether any scanned pages were misfed, as indicated in the above rejections.

Thus, both Sturgeon and Liu disclose/teach "determining if pages of the [scanned] document are properly aligned for scanning."

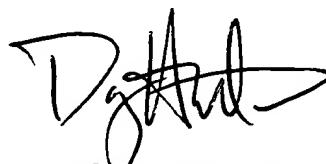
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doug Hutton whose telephone number is (571) 272-4137. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

WDH
May 9, 2005

A handwritten signature in black ink, appearing to read 'D. Hutton', with a stylized flourish at the end.

**DOUG HUTTON
PATENT EXAMINER
TECH CENTER 2100**